Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use	)	ET Docket No. 94-32
	)	
	)	
	)	

To: The Commission

COMMENTS OF THE
ASSOCIATION OF AMERICAN RAILROADS

The Association of American Railroads ("AAR"), by its attorneys and pursuant to Section 1.415 of the rules of the Federal Communications Commission ("the Commission"), hereby submits its Comments in response to the Notice of Proposed Rulemaking ("NPRM") in the above-referenced proceeding.

The purpose of this proceeding is to elicit comments on the Commission's tentative allocations of 50 MHz of spectrum that will be transferred from Federal Government to private sector use. The AAR suggests that the Commission reevaluate its tentative conclusions and allocate a band of the additional spectrum for private use as requested by the Coalition of Private Users of Emerging Multimedia Technologies ("COPE") of which the AAR is a member. Such an allocation will be in the public interest because it will meet the statutory goals of promoting safety, fostering economic growth and improving access to communications by industry.

I. PRELIMINARY STATEMENT

AAR is a voluntary, non-profit organization composed of member railroad companies operating in the United States, Canada and Mexico. These railroad companies generate 97 percent of the total operating revenues of all railroads in the United States. The AAR is the joint representative and agent of these railroads in connection with federal regulatory matters of common concern to the industry as a whole, including matters pertaining to regulation of communications. In addition, AAR functions as the frequency coordinator with respect to operation of land mobile and other radio-based services.

II. RAILROADS USE PRIVATE RADIO FACILITIES TO ENSURE SAFE AND RELIABLE OPERATIONS.

The railroad industry is a major use of private land mobile radio ("PLMR") communications operating below 512 MHz, and of private operational-fixed microwave service operating in the 2 and 6 GHz bands. On locomotives and rail equipment, along railroad tracks, and in stations, terminals and train yards across the nation, railroads currently utilize about 16,400 mobile base stations, 45,000 mobile radios, 125,000 portable radios, 5,500 talking defect detectors, and 56,000 end-of-train, head-of-train devices and locomotive mobiles. Historically, mobile radio has been an important and integral factor in railroad operations. In the 1940s, the FCC established the Railroad Radio Service because of the highly specialized mobile communications needs of the railroad industry and the importance of mobile radio to the safe and efficient operation of the

railroads.[1/] Since then, the railroads have used land mobile frequencies for functions such as end-to-end and wayside point-to-train communications. Mobile radio units with dedicated radio channels permit communications among dispatchers and train crews, yard crews, switch crews, signal technicians, mechanical and engineering crews and other personnel to ensure safe and reliable railroad operations.

The railroads' fixed microwave systems are used to automatically transmit signals and remotely control switching of tracks necessary for safe routing of trains through stations and freight yards. In addition, these systems relay critical telemetry data from trackside defect detectors located throughout the rail network. Information about damaged rails and overheated wheel bearings and dragging equipment is automatically transmitted from these detectors to dispatchers and other personnel, who then can take appropriate action to prevent accidents from occurring.

The Federal Railroad Administration ("FRA") has recognized the important safety-relevant uses of the railroads' private radio services.[2/] The FRA has cited the essential nature of radio communications in control of train movement, switching operations, communications of wayside detector information and

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1/ See "Land Mobile Services," Memorandum Opinion and Order, 51 FCC 2d 945, 962-967 (1975) and General Mobile Radio Service, 13 FCC 1190, 1199-1204 (1949). Section 90.91 of the Commission's rules governs the Railroad Radio Service. 47 C.F.R. § 90.91.

2/ Railroad Communications and Train Control: Report to Congress, Federal Railroad Administration, July, 1994 (FRA Report").

emergency response. According to the FRA, radio communications "are now a vital necessity rather than a convenience." FRA Report at 23. The FRA has observed further the need for railroads to employ advanced types of data communications technology, such as those identified in the COPE petition, to increase the safety of railroad operations. Id. at 74-76.

III. ALLOCATION OF SPECTRUM TO PRIVATE USERS IS IN THE PUBLIC INTEREST

In identifying potential uses of the newly released spectrum, the Commission noted that it had not specifically identified spectrum for advanced private communications as requested by COPE. NPRM at ¶ 16. The Commission proffered two reasons for this action -- reasons AAR contends are not supported by Sections 309(j) or 332(a) of the Communications Act (the "Act"). 47 U.S.C. §§309(j), 332(a).

A. Additional Spectrum Should Be Allocated Based on the Safety and Operational Needs of the Private Radio Users

The Commission's first reason for declining to consider allocating a part of the additional 50 MHz of spectrum for private use was that "private users can receive [similar] services from commercial providers." Id. This reasoning appears to contradict Section 332(a) of the Act and, in addition, exhibits a misunderstanding of the role of private radio facilities in railroad operations. Section 332(a) requires the Commission, when it takes action to manage the spectrum made available to PLMR users, to consider whether such actions will, inter alia, promote the safety of life and property and improve

the efficiency of spectrum use based upon sound engineering principles, user operational requirements, and marketplace demand.

Requiring the railroads to purchase mobile radio services from commercial carriers fails to recognize the railroad's unique operational requirements that compel the use of "in-house" railroad radio communications systems to safeguard life and property and ensure reliable railroad operations. The railroads' core business involves the closely coordinated movement of freight and passengers across the nation. Standard industry practice involves the routine sharing of equipment and rights-of-way between and among different railroad companies. As a result, all railroad radio communications must be interoperable and available on a nationwide basis. No one single commercial communications carrier has the capability of providing economical service in all operational areas that extend from major metropolitan areas to desolate prairies and remote mountain regions.

Even assuming that commercial providers could form a single interoperable network, there remain significant problems with operational quality and speed of repair during outages. For example, typical commercial carrier systems are designed for peak loading levels which are substantially lower than the total number of possible users served. The effect of such limited capacity is that during major disasters, such as tornados,

earthquakes, hurricanes and floods[3/], the commercial systems become overloaded, resulting in a total disruption of service. Such a result does not occur with private systems such as those designed and operated by the railroad industry, which are engineered for a higher peak capacities.

Moreover, commercial carriers' repair times typically do not satisfy private users' operational and safety needs. Users of commercial applications can wait typically from four to 12 hours for repairs to be completed -- downtimes which would have significant negative effects on safety and reliability of the railroads.

B. The Act Prohibits the Commission from Altering the Act's Established Spectrum Allocation Criteria and Procedures

The Commission's second reason for not considering allocating a band of the additional 50 MHz of spectrum for private use was that private users "can compete in obtaining spectrum on the same basis as commercial providers." NPRM at ¶ 16. This reasoning appears to run counter to the standards governing the Commission's use of its competitive bidding authority under Section 309(j).

Section 309(j)(1) authorizes the Commission to use auctions only as a means to grant licenses to qualified applicants in cases where mutually exclusive applications are accepted for

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3/ For example, during the midwest floods in the summer of 1993, the interoperability of the railroad industry's communications network was integral to ensuring that trains were routed safely over other railroads' tracks to keep traffic moving through the midwest on tracks that were not under water.

filing. Further, Section 309(j)(6)(1) specifies that use of competitive bidding shall not alter spectrum allocation criteria and procedures established by other provisions of the Communications Act, such as Section 332(a) discussed above. Thus, the Commission may not use competitive bidding as a criterion by which to decide the appropriate allocation of new spectrum. Rather, competitive bidding is to be used solely as a license assignment tool.

Furthermore, requiring private users to compete in auctions for additional spectrum to support their operational needs contradicts the plain language of the Section 309(j)(2)(A). Only spectrum licenses whose principal use will involve, or is likely to involve, the receipt of compensation from subscribers in return for use of the spectrum are eligible to be awarded through competitive bidding. In light of this provision, private users are not required under the statute to compete against commercial providers of spectrum-based services in order to acquire additional spectrum for their internal operational use.

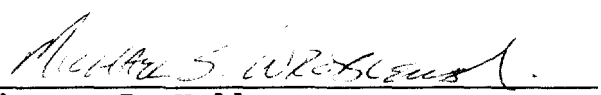
IV. Conclusion

In light of the foregoing reasons, the Commission should allocate additional spectrum to private users to support their operations and to safeguard life and property. AAR urges the

Commission to set aside a portion of the reallocated Federal spectrum for the types of uses described in the COPE petition.

Respectfully submitted,

THE ASSOCIATION OF AMERICAN RAILROADS

By: 

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December 19, 1994

CERTIFICATE OF SERVICE

I, Bridget Y. Monroe, hereby certify that on this 19th day of December, 1994, a copy of the foregoing "Comments of Association of American Railroads" was hand-delivered to the following:

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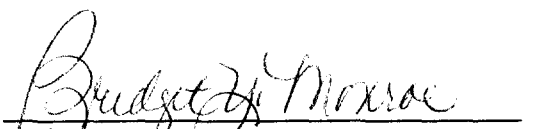

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